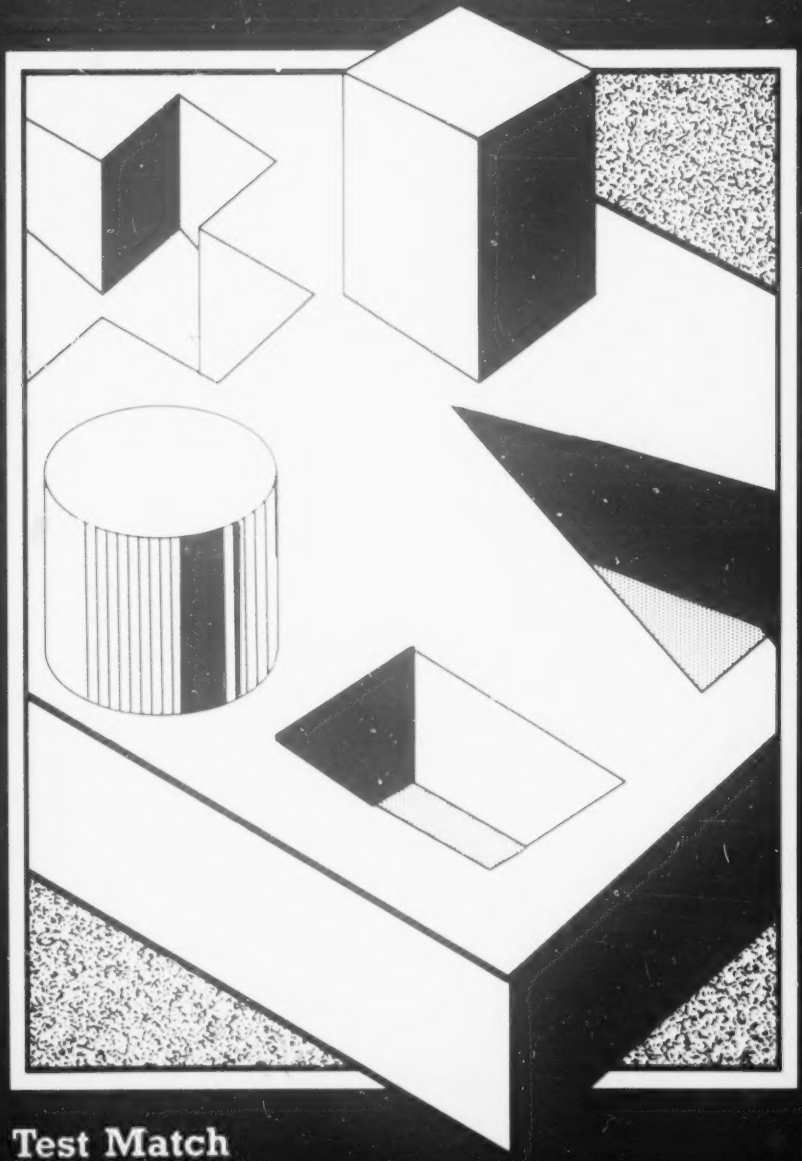
FEBRUARY 1986
ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska



Test Match

Alaska Economic Trends

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The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government employment includes primary and secondary schools and personnel employed by the University of Alaska.

Benchmark date March 1984.

P Denotes preliminary estimates.
R Denotes revised estimates.

Test Match

By Paul Williams

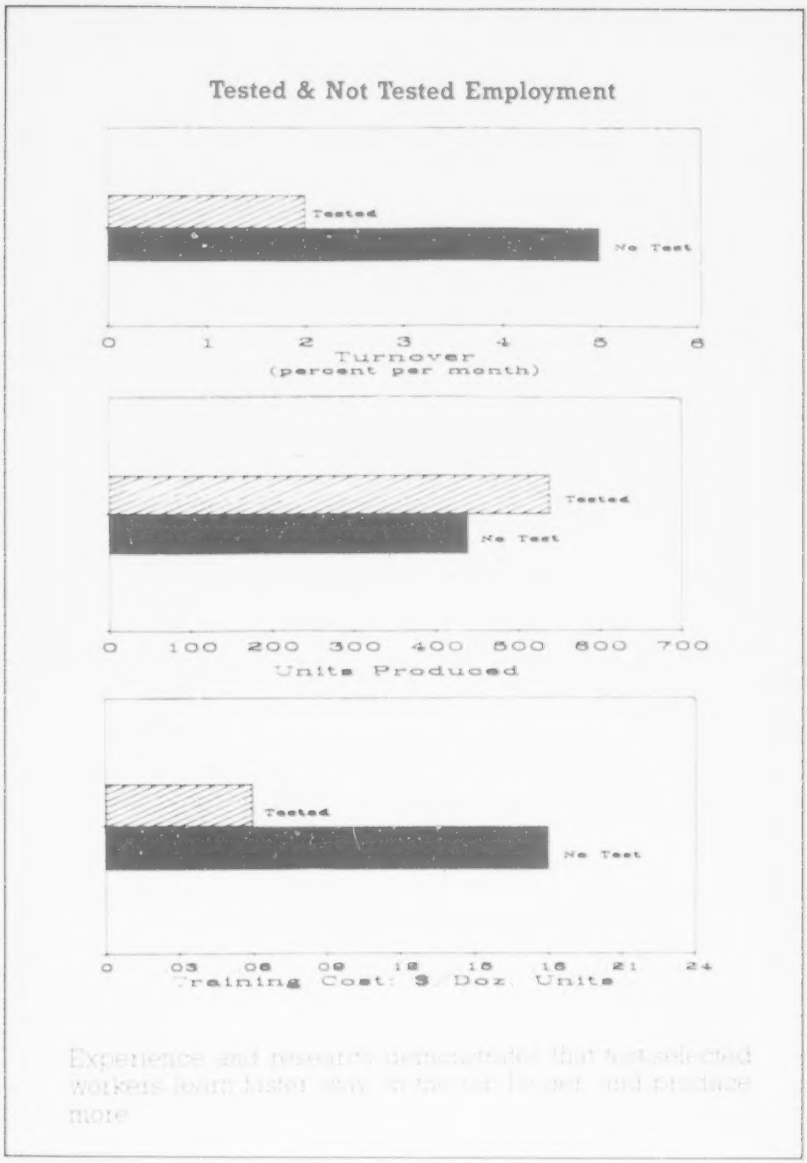
The Alaska Employment Service is implementing a new aptitude testing program which will help employers select the best job applicants for virtually any job in the U.S. labor market. Current vocational test research has demonstrated that Job Service will be able to refer individuals who can be more productive workers because they will be test-selected. Along with an increase in productivity for the employer, this program also helps the individual job seeker. Job Service applicants can find out the kinds of work in which they have the most potential for success. Too often a worker may have the potential to do a variety of jobs but never pursues work other than the narrow area where he or she first entered the labor force. There may be hundreds of jobs for which these people could qualify given an opportunity. And the bottom line is that these test-selected workers do a better job at less total cost to an employer.

Why Test?

Every employer wants qualified workers. Matching workers with jobs through the use of the General Aptitude Test Battery is one of the valuable services provided to employers by the Job Service. Testing will not solve all of an employer's problems, but it can help to improve the quality of the work force and reduce the high cost of labor turnover. The following illustration indicates the effects of test selection on various personnel factors. These results are based upon employment research conducted by the North Carolina Employment Service.

In the past, the overall value to an employer of the Job Service aptitude testing program had been limited by the fact that not all occupations were covered by the available selection tests. Aptitude tests had been developed to screen applicants for approximately 400 occupations of the over 12,000 different jobs in the U.S. economy. During recent years leading authorities in personnel testing have been working with the U.S. Department of Labor to determine if the results of research conducted over the past thirty-five years to develop test batteries for specific jobs could be generalized to cover occupations not directly studied.

The research finding show that this can be done: aptitude test validities obtained for the approximately 400 occupations can be generalized to the other 12,000 plus jobs in the U.S. The research also supports the idea of generalizing aptitude tests on a geographic basis. That is, a valid test for an occupation in one geographical area is also valid for the same occupation in a different geographical area. In Alaska,



Experience and research demonstrate that test-selected workers learn faster, stay on the job longer, and produce more.

generalization of test validities to related occupations and on a geographic basis, is called *Test Match*. Through use of it is now possible for the Job Service to assess the vocational aptitudes needed by job applicants for success in every type of work in our economy and for every area of the country.

In addition to having valid tests for all jobs, the new system provides employers more useful test results on applicants. Under the previous system, test results were reported to an employer in three broad categories. The employer could not distinguish among individuals within a category. The Employment Service is now able to cluster the 12,000 occupations in the national economy into five job families. The aptitude scores of tested job applicants are converted to percentile scores for each of these five families. By ranking the percentile scores of individuals seeking work in the same occupation, we can compare their abilities to perform successfully on the job.

The employer will be told how the applicants rank in terms of their percentile score. For applicants who meet the employer's other hiring criteria, the percentile scores will make hiring decisions easier and faster. Employers will be able to obtain test-selected workers for all jobs instead of a few primarily entry-level jobs. They can receive precise information showing exactly where applicants stand in relation to each other. These changes will have a dramatic impact on recruitment, screening, referral, and the hiring of applicants.

Legal Implications

There are several legal questions raised by the Test Match approach. Is it permissible to use a test developed for one job to select workers for another job which may have somewhat different tasks? Is it permissible to use a test developed for one geographic area to select workers for jobs in another geographic area? In the only case involving U.S. Department of Labor tests which reached court, the opinion of the judge supported the generalization of tests among jobs with similar tasks and from one location to another (Peques v. Mississippi). Another question involves the fairness of tests to groups covered by the Civil Rights Act of 1964. It was the same court's opinion that these tests were fair and that they conformed to EEOC guidelines.

Best Available Applicants Referred

Job Service will refer the best applicants according to percentile scores. Applicants referred will also meet the employer's other hiring requirements. The report to employers will contain the name of the applicant, the job family in which the job falls, and the applicant's percentile score for each job family listed. With these reports, the employer will be able to rank order applicants and select workers based on the overall criteria established for the job. If the Job Service office has been provided all hiring criteria used by the company, the final selection should be quite simple since only those applicants who meet all criteria will be referred.

Economic Impact

The projected economic impact of Test Match is far higher than the public and the employer community might realize. Even for small organizations, dollar savings from higher productivity can amount to thousands of dollars a year. It is estimated that the potential saving to the Federalgovernment as an employer would be approximately $16 billion per year if tests were given wide use.

If the U.S. Job Service made maximum use of GATB for their four million annual placements, the potential increase in work force productivity would amount to between $50 billion and $100 billion per year! A recent analysis of the economic value of test selection in a North Carolina pilot project estimated that employers using validity generalization procedures saved $21,000,000 in one year.

The amount of productivity increase that an individual company can expect is dependent on five factors. These are: (1) the number of hires per year, (2) average job tenure, (3) validity of the selection method, (4)average salary per year, and (5) selection ratio of applicants to hires.

The key variable is the validity level of the selection method. Research on commonly used methods of employee selection has shown that ability, as measured by a valid aptitude test battery, has the highest prediction validity coefficient and is therefore the most useful in employee selection. Listed below are common selectors and their respective validity coefficients:

Prediction	Validity Coefficient
Ability Test	.53
Job Tryout	.44
Bio Data	.37
Reference Check	.26
GPA - College	.11
Experience	.18
Interview	.14
Training & Experience	.13
Education	.10

If a company, which hires 30 workers per year and has an average job tenure of two years, pays an average salary of $6,700 per year, and hires four out of every ten applicants for each job opening starts using tests rather than random selection and begins applying a test utility formula, the increase in productivity would be worth $82,667.00. Utilizing the same utility formula but substituting training and experience for an ability test, the productivity increase would be worth

$20,276.00. The resultant productivity savings to the employer for using an ability test would be $63,391.00. Test selection pays.

The use of the General Aptitude Test Battery provides the employer with a professionally validated test for job selection that can be used with confidence without the employer undergoing the lengthy and expensive process of producing their own test validation. In addition, employers should experience a reduction in personnel administration costs, an increase in the quality and potential of workers, and a significant increase in worker productivity.

The benefits also extend to job applicants. Testing leads to more meaningful job choices, thus eliminating lost time spent in pursuing jobs for which they are not suited. Employees should enjoy increased job satisfaction through an increased probability of success. In addition, the public and specifically the job seekers can expect that higher quality jobs will be available because employers will be more willing to give the Job Service a wide variety of job orders.

Alaska

By Kathleen Thomas

Seafood Harvesting Employment in Alaska

Seafood harvesting employment, which includes skippers/owners/operators and crew members, is not counted in the other methods of measuring employment described in this publication. Fishing employment is not covered by unemployment insurance unless the number of the crew is ten or more and received a wage or salary. Since most crew members work for a share of the catch they are considered self employed. In order to estimate seafood harvesting employment, an alternative method is used.

What is actually counted in measuring seafood harvesting employment is the number of fishing vessels making landings at processors. If a vessel makes more than one landing during the month it is counted only once for that month and not each time it lands. To get a better estimate of seafood harvesting employment, a survey was performed before this data series was begun. The survey provided information on average crew size for a vessel in each fishery. The average crew size for each fishery is termed the crew factor. By multiplying the crew factor times the number of vessels making landings in each fishery, an estimate can be made of the number of persons employed in seafood harvesting.

The most recent data on seafood harvesting employment is for 1983. Only statewide data is presented here though data is available for the four regions: Southeast, Gulf Coast, Southwest, and Northern. This regional data will be available in the publication Seafood Harvesting and Processing Employment, 1982 - 1984.

Besides the commercial fishermen, the most employment from fishing is generated from the tender boats that transport fish for the processors, fish canning processors, fresh and frozen fish processors, refrigerated warehousing, wholesale distribution, and a myriad of secondary services such as boat repair, oil and fuel, and other supplies required to maintain the crew and vessels. This other employment, while not always identified as fisheries related, are included in nonagricultural wage and salary employment so they need no special treatment.

Because fish harvesting employment is not included in the other methods of employment estimation, the effect of the fishing industry on total employment is frequently underestimated. To overcome this limitation, seafood harvesting employment was added to nonagricul-

Summary

Nonagricultural Wage and Salary Employment
By Place of Work
Alaska

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	12/84
Nonag. Wage & Salary					
Mining					
Construction					
Manufacturing					
Food & Kindred Prod.					
Lumber & Paper Prod.					
All Other Mfg.					
Trans. Comm. & Utilities					
Trucking & Warehs.					
Water Transportation					
Air Transportation					
Other Trans. Comm. &					
Utilities					
Trade					
Wholesale					
Retail					
Gen. Mer. & Apparel					
Food Stores					
Eating & Drinking Pl.					
Other Retail Trade					
Finance Ins. & R.E.					
Services & Misc.					
Government					
Federal					
State					
Local					

Government includes workers in private establishments (e.g., educational institutions) employed by the University of Alaska.

Benchmark Date March 1984

P/ Denotes Preliminary Estimates
R/ Denotes Revised Estimates

Current Events

Alaska wage and salary employment declined by 3500 jobs in the month of December. The decrease was spread across all industries, the service industry being the lone exception. Year to year gains were experienced in all industries except construction, which was down

tural wage and salary employment for comparison purposes. Seafood processing employment is already included in nonagricultural wage and salary employment. Seafood industry employment is the sum of seafood harvesting and seafood processing employment.

Table 1
Seafood Harvesting
Statewide Employment by Species
1983

Species	Ann Avg	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Salmon	4654	61	58	406	1451	7,063	7,952	8,111	7,334	4,662	1,154	664	169
Shellfish	1,952	291	278	1,011	1,161	1,809	2,341	2,344	2,307	1,736	1,436	1,027	1,414
Halibut	287						1,004	1,011	1,004	1,003			
Bottomfish	1,114	1,101	1,103	1,104	1,104	1,105	1,107	1,107	1,106	1,105	1,105	1,104	1,102
Sablefish	140	15	15	15	15	15	15	15	15	15	15	15	15
Herring	56	1	1	1	1	1,004	1	1	1	1	1	1	1
Total Employment	7,834	1,469	1,455	2,537	3,732	11,005	12,420	13,589	11,767	8,522	3,711	2,811	1,701

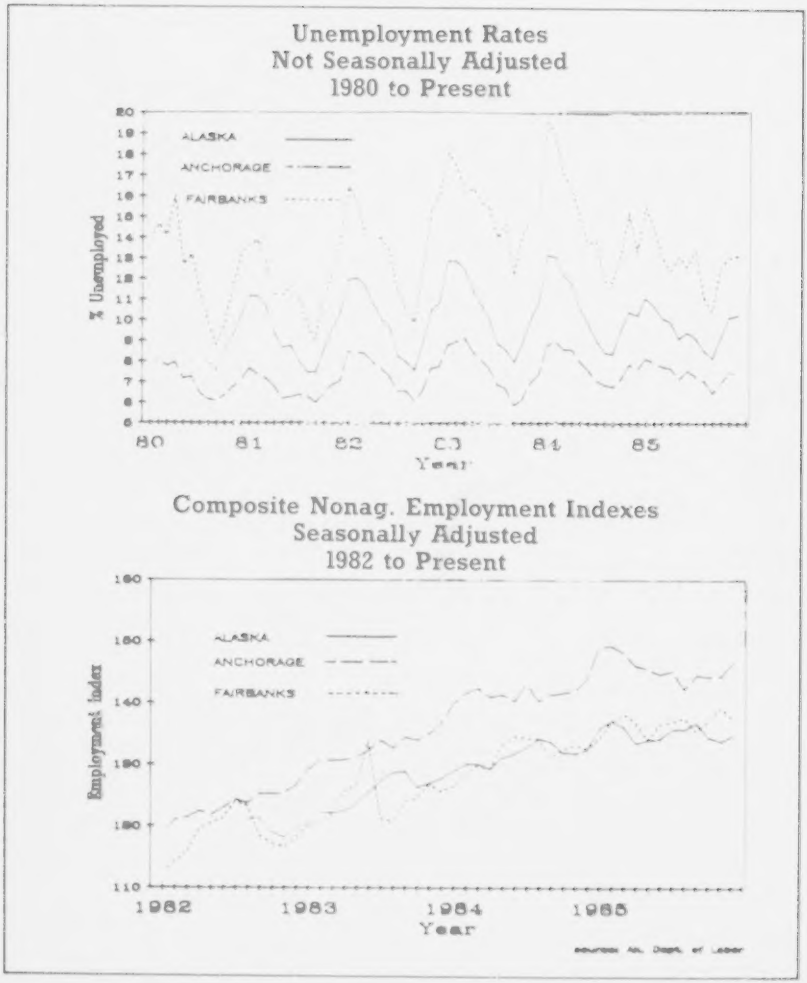
Table 2
Nonagricultural and Seafood Harvesting Employment
1983

Statewide	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Ann Avg	Wages	Avg Mo. Wage
Total Nonagriculture and Harvesting Employment 1/	10,000	9,900	10,000	10,100	10,200	10,300	10,400	10,500	10,400	10,300	10,200	10,100	10,200	$1,200,000,000	2,499
Total Seafood Industry Employment	8,000	7,900	8,000	8,100	8,200	8,300	8,400	8,500	8,400	8,300	8,200	8,100	8,200	$1,000,000,000	3,607
Seafood Harvesting Employment	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	7,000	6,000	5,000	4,000	5,000	$500,000,000	5,753
Seafood Processing Employment	7,000	6,900	6,800	6,700	6,600	6,500	6,400	6,300	6,400	6,500	6,600	6,700	6,600	$500,000,000	494

1/ Since seafood processing employment is seasonally concentrated, average annual wages and total wages are not available for the whole industry. Instead, seafood processing employment data was expanded out for comparison of the seafood industry to all industry employment. Total nonagriculture and harvesting employment is the sum of nonagricultural employment and seafood harvesting employment.

Source: Alaska Department of Labor, Research and Analysis

In 1983, seafood industry employment was 6.4% of total nonagricultural wage and salary and fish harvesting employment, on an annual average basis. During the peak month of seafood industry employment, July, the seafood industry comprised 15.6% of total employment. Of that 15.6%, over half was fish harvesting employment. The seafood industry provides more employment in Alaska than the mining industry. The mining industry only comprises 3.7% of annual average total nonagricultural and harvesting employment. While mining (oil and gas) is more important in terms of their tax contribution, the seafood industry is more important in terms of employment.



Anchorage/Matsu

By Greg Huff

Shift/Share Analysis

Anchorage wage and salary employment for December fell to 113,150. The 1985 growth rate in employment was 3.2. The big losers in employment were the construction and construction related industries. The falling number of construction jobs began a new employment trend in Anchorage. The largest number of jobs were created in trade, services and local government. The following shift-share analysis will shed some light on what factors may influence the direction of Anchorage's economy and employment opportunities into the late 1980s.

Definition

Shift-share analysis measures changes in the number of jobs in a regional or local economy that are caused by national employment trends and those caused by independent local factors. It can also identify industries with potential for employment growth or decline. Three factors are postulated by the shift-share analysis as reasons for changing employment levels in a particular region or locale. The first factor measures changes in local employment attributable to a change in employment for the nation. Specifically, if national employment is growing, one would expect that growth to influence Anchorage employment growth. The second factor is industrial mix. This factor measures specific industry employment changes caused by the relative growth or decline of the industry nationally. Industries expand or contract at different rates, changing the relative importance of industries in terms of the proportion of jobs they provide. Notice that the net change in total employment in the industry mix column of table 1, is zero. Only at the industry level is employment affected by the industry mix component.

The third factor, local share, measures the extent to which factors unique to Anchorage have caused a growth or decline in employment. The local component aids in identifying those industries in Anchorage that outperformed those same industries nationally.

Employment in a local industry that represents a greater proportion of total local employment than that experienced nationwide reflects certain local features that make it a more important industry. The coefficient of specialization vividly illustrates the relative importance of an industry in Anchorage versus the nation. A coefficient that is greater than one represents an industry with a higher proportion of total employment in Anchorage than for the U.S. as a whole. A coefficient of

less than one means that industry is a smaller portion of total Anchorage employment than for the nation.

In summary, the first two factors of the shift/share analysis measure the change in Anchorage employment due to national and industry mix changes. They represent the change in employment expected if Anchorage had changed at the same rate as the U.S. However, local variances in employment trends do exist. The third factor describes this portion of employment level changes due to local trends. The coefficient of specialization aids in the analysis by measuring an industry's relative importance in Anchorage versus the nation. These four components of analysis are not static; they are dynamic, changing with time as economic factors change.

Industry Analysis

This analysis covers Anchorage from 1975 to 1984. During this time two distinct trends are evident (see table 1 and table 2). The first covers 1975 to 1980, which include a period of high growth generated by pipeline construction and a subsequent period of slow growth after completion of the pipeline. The second trend covers the period of rapid growth caused by the state oil revenue boom. During the entire period from 1975 to 1984 national factors accounted for nearly 40% of total Anchorage employment growth, the majority of which was generated during the lean post-pipeline years. In fact few industries had positive growth from local impact during this period. The net loss in jobs caused by local factors were offset by national growth components. The opposite was true during the 1980 to 1984 period. Most industries grew rapidly due to local factors with only 12% of the job growth resulting from national factors. During the first half of this period, a major recession was in the works nationally, whereas the oil generated boom was in high gear in Anchorage. This analysis gives us a clue to what influences may cause employment growth in the current economic cycle which began in 1985. If the national economy stays relatively healthy, the national component will provide new jobs in Anchorage even if local factors drag down employment levels.

The mining industry grew 192% from 1975 to 1984 and received five times more new jobs from local factors than from national factors. The coefficient of specialization highlights its status in the Anchorage economy. In 1984 the proportion of mining jobs in Anchorage was over three times greater than for the U.S. Despite rapid growth, mining remains a small segment of the Anchorage economy representing 3.4% of total employment in 1984. Another oil and gas headquarters and support city,Houston, Texas, has 6.6% of its jobs in the mining industry. Mining industry employment in Anchorage is comprised of 90% oil and gas related jobs; this compares to only 60% in the U.S. as a whole.

Nonagricultural Wage and Salary Employment
By Place of Work
Anchorage

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	Changes From: 12/84
Nonag. Wage & Salary	[illegible]	[illegible]	[illegible]	1550	1500
Mining	[illegible]	[illegible]	[illegible]	0	450
Construction	[illegible]	[illegible]	[illegible]	950	1500
Manufacturing	[illegible]	[illegible]	[illegible]	50	250
Food & Kindred Prd.	[illegible]	[illegible]	[illegible]	50	-50
Other Mfg.	[illegible]	[illegible]	[illegible]	0	200
Trans. Comm. & Utilities	[illegible]	[illegible]	[illegible]	300	400
Trucking & Warehse.	[illegible]	[illegible]	[illegible]	0	-50
Water Transportation	[illegible]	[illegible]	[illegible]	50	0
Air Transportation	[illegible]	[illegible]	[illegible]	200	450
Other Trans. Comm. & Util.	[illegible]	[illegible]	[illegible]		
Utilities	[illegible]	[illegible]	[illegible]	50	0
Trade	[illegible]	[illegible]	[illegible]	350	300
Wholesale	[illegible]	[illegible]	[illegible]	100	100
Retail	[illegible]	[illegible]	[illegible]	250	400
Gen. Merchandise	[illegible]	[illegible]	[illegible]	100	100
Food Stores	[illegible]	[illegible]	[illegible]	0	100
Eating & Drinking Pl.	[illegible]	[illegible]	[illegible]	150	200
Other Retail Trade	[illegible]	[illegible]	[illegible]	100	200
Finance Ins. & R.E.	[illegible]	[illegible]	[illegible]	100	450
Services & Misc.	[illegible]	[illegible]	[illegible]	150	950
Government	[illegible]	[illegible]	[illegible]	50	700
Federal	[illegible]	[illegible]	[illegible]	0	300
State	[illegible]	[illegible]	[illegible]	50	500
Local	[illegible]	[illegible]	[illegible]	100	500

Nonagricultural Wage and Salary Employment
By Place of Work
Anchorage-Matsu

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	Changes From: 12/84
Nonag. Wage & Salary	[illegible]	[illegible]	[illegible]	1400	2550
Mining	[illegible]	[illegible]	[illegible]	0	400
Construction	[illegible]	[illegible]	[illegible]	900	1700
Manufacturing	[illegible]	[illegible]	[illegible]	100	150
Trans. Comm. & Utilities	[illegible]	[illegible]	[illegible]	250	650
Trade	[illegible]	[illegible]	[illegible]	150	800
Finance Ins. & R.E.	[illegible]	[illegible]	[illegible]	150	400
Services & Misc.	[illegible]	[illegible]	[illegible]	50	1200
Government	[illegible]	[illegible]	[illegible]	100	950

Air transportation and the federal government also have very high specialization coefficients. Air transportation is six times as important to Anchorage's economy than it is to the national economy, but this industry's importance has decreased over time. The reasons for the high coefficient are: Anchorage International Airport is known as the crossroad of the world; Anchorage has the highest per capita number of pilots and aircraft in the U.S.; and there are large airlifts of seafood during the summer. Growth of this industry from 1975 to 1980 was due to national trends, while more recent growth has been based on both local and national factors.

Trends in federal government employment have been mixed. Generally, the federal government has been a slow growth industry. However, it provides three times the jobs in Anchorage, as a percent of total employment, than nationally. State and local employment in Anchorage has primarily been a local phenomena, particularly during the 1980 to 1984 period. The proportion of local government in 1984 remained below the average across the country.

The construction industry has experienced very pronounced changes in its shift/share trends. After the pipeline completion, local factors resulted in large losses in the number of construction jobs; national factors provided some positive upward pressure on the number of jobs, but the net effect was a large loss in construction employment. From 1980 to 1984 the opposite is true; the local components provided all the gains in the number of construction jobs. In 1984 construction accounted for 9% of the jobs in Anchorage compared to 4.6% nationally.

Trade and services showed the largest gains in employment from 1975 to 1984 but over the long run national factors have contributed more to the services sector than local factors. This is a result of local losses after the pipeline completion. The proportion of health services has remained much below the national level, but has inched upwards since 1975. Both national and local trends will likely continue to provide additional growth in this sector. The coefficient of 1.23 for eating and drinking establishments pulls the overall trade coefficient above one. High incomes, high labor force participation rate and a young labor force all contribute to make eating and drinking a proportionately larger employer in Anchorage than it is nationally.

Manufacturing employment levels are at the other end of the scale. In Anchorage manufacturing accounts for only 4.3% of all jobs compared to 20.5% nationally. However, local factors have contributed the bulk of the new manufacturing jobs in Anchorage. Growth has been based in the nonfood sector.

Changes in Anchorage Employment
Anchorage Shift/Share Analysis
(1975-1984)

	1975 to 1984 Change due to			Coefficient of Specialization		
	National Growth	Industry Mix	Local Factors	1975	1980	1984
Mining				1.89	2.95	3.30
Construction					1.41	1.96
Gen. Building					1.04	2.26
Heavy					1.72	1.76
Special Trades					1.49	1.88
Manufacturing					0.15	0.12
Food Processing					0.76	0.33
TCPU					1.75	1.53
Trucking					0.97	0.87
Water Trans.					1.62	1.51
Air Trans.					7.51	6.43
Communications					1.40	1.15
Pipeline					0.77	0.72
Trade					0.99	1.03
Wholesale					0.88	1.00
Retail					0.97	1.04
Gen. Merchandise					0.87	0.61
Food Stores					0.79	0.92
Eating & Drink					0.96	0.99
Eat & Drink					1.12	1.23
FIRE					1.16	1.23
Banking					1.37	1.37
Services					1.06	1.03
Misc. Hotel					1.78	1.52
Business Services					1.23	1.10
Medical Services					0.65	0.64
Government					1.50	1.34
Federal					2.26	3.06
State					1.36	1.50
Local					1.49	0.77
Total Employment						

Changes in Anchorage Employment
Anchorage Shift/Share Analysis
(1975-1980 and 1980-1984)

	1975-1980 Changes due to			1980-1984 Changes due to		
	National Growth	Industry Mix	Local Factors	National Growth	Industry Mix	Local Factors
Mining	225	349	685	120	386	1259
Construction	2316	42	1567	2811	245	4644
Gen Building	1115	834	1089	44	62	2038
Heavy	1253	44	633	61	310	430
Special Trades	1954	1008	1745	143	99	2203
Manufacturing	1075	1021	1295	1119	1432	187
Food Processing	94	43	82	97	87	466
TCU	1485	1081	1254	2913	1826	1319
Trucking	1961	1	1	44	11	317
Water Trans	20	1	2	13	32	79
Air Trans	1956	1	1441	1	1165	471
Communication	1139	1078	1	1	1	275
Utilities	87	1	1	1	24	157
Total Trade	7511	5	1	8	1	6474
Wholesale	1113	1	1	1	1	3831
Retail	6398	1	1	1	1	6128
Gen Merchandise	1	1	1	1	1	104
Food Stores	1	1	1	1	1	1228
Retail Automotive	1	1	1	1	1	592
Eat & Drink	1	1	1	1	1	2955
FIRE	1	1	1	1	1	2466
Banking	1	1	1	1	1	681
Services	1	1	1	1	1	2482
Motel/Hotel	1	1	1	1	1	280
Business Services	1	1	1	1	1	861
Medical Services	1	1	1	1	1	1091
Government	1	1	1	1	1	2297
Federal	1	1	1	1	1	826
State	1	1	1	1	1	1418
Local	1	1	1	1	1	1448
Total Employment	1	1	1	1	1	36097

1/ The sub-industry data for any industry totals Anchorage was not completed for those sub-industry categories that were considered unimportant.

2/ The coefficient of specialization measures the relative importance of each industry in the Anchorage economy. A score of 1 indicates that the economy is an industry with a national average of employment in that industry compared to the national average.

Labor Force By Region and Census Area

	Labor Force			Unemployment			Rate			Employment		
	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84

Fairbanks/Interior

By Neal Fried

The Unemployed in Fairbanks

Late winter is when the number of individuals collecting unemployment insurance peaks in Fairbanks. Most construction projects have closed, tourism has been dormant for many months and overall economic activity drops along with the temperature. Each year thousands of workers lose their jobs in the winter and many of these workers collect unemployment benefits to help tide them over the lean months.

Not all workers collect unemployment insurance when they lose their jobs. They must be covered by the unemployment insurance program. Most wage and salary workers are covered. The largest group not covered by this program are the self-employed. Others not covered are fully commissioned salespersons, domestic workers, fishermen, agricultural workers and elected and appointed officials.

The weekly benefit amount unemployment insurance claimants receive is determined by their previous earnings. The minimum weekly unemployment check is $48 and the maximum is $188. This amount can be supplemented by an additional $24 per dependent, up to three dependents. In other words, the maximum weekly benefit for an individual is $260 per week.

The duration of benefits is determined by the claimants previous work history with workers having longer continuous employment entitled to more weeks of benefits. Duration of benefits ranges from 16 to 26 weeks. The extended benefit program can extend the duration of benefits up to a maximum of 13 additional weeks.

The average weekly regular benefit amount per claimant in Fairbanks was $164 and the duration was 16 weeks. Fairbanks residents represented 16% of all claimants, a close match to Fairbanks' total share of wage and salary employment. In 1986 $16.9 million was paid out in unemployment insurance benefits to Fairbanks residents, setting a new record. Though Fairbanks received the second largest amount of unemployment dollars in Alaska (after Anchorage), additional unemployment claims flowed to workers who earned their wages in Alaska but collected their unemployment outside the state.

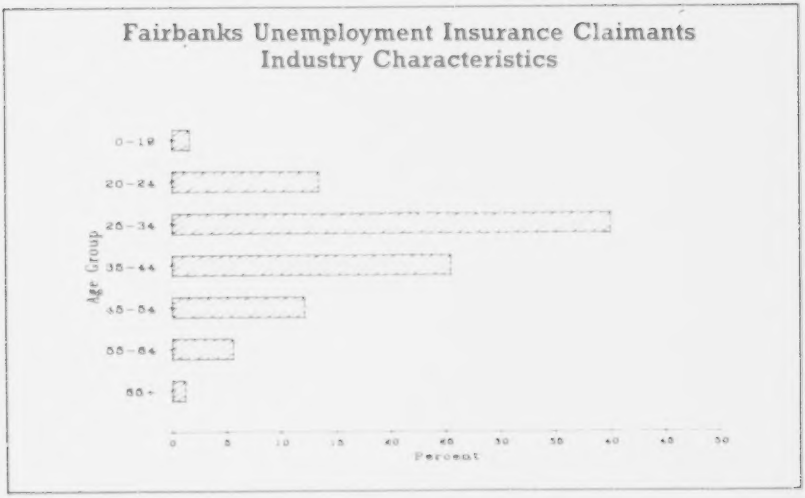
Sex Characteristics

Though women represent approximately 42% of Fairbanks' labor force, only 31% of the Fairbanks unemployment claimants were wom-

en. Women are underrepresented among unemployment insurance claimants because their occupational and industry mix is different from men. Men dominate the construction trades where a disproportionate number of the unemployment insurance claimants work before losing their jobs. Women, on the other hand, dominate the clerical and sales occupations where employment is more stable. Women are also strongly represented in professional and managerial occupations that tend to be more stable.

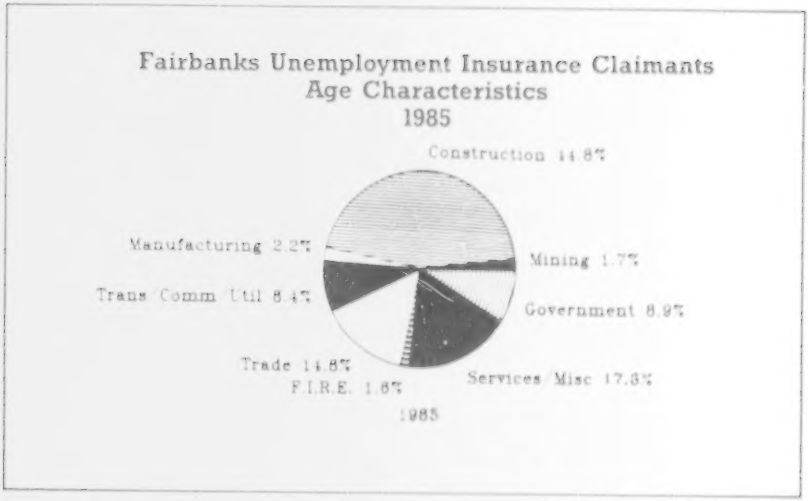
Age Characteristics

Unemployment claimants tend to be young. Fifty-five percent of Fairbanks unemployment claimants were under 35. Younger workers tend to be less strongly attached to the labor force. These workers change jobs more often than an older worker, and therefore will experience more periods of unemployment. They tend to be more highly concentrated in those industries such as construction and mining which experience higher rates of unemployment. Younger workers also have less experience and seniority and are therefore often first to be let go during a layoff period.



Industry Characteristics

Forty-five percent of Fairbanks unemployment claimants were previously employed in construction. This is not unusual since only ten percent of Fairbanks total wage and salary work force are employed in the construction industry. Outside of Fairbanks' small mining indus-



Occupations

Summary

Nonagricultural Wage and Salary Employment
By Place of Work
Fairbanks

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	12/84
Nonag. Wage & Salary	25350	25100	24200	250	1150
Mining	200	150	150	50	50
Construction	1300	1050	1050	250	250
Manufacturing	600	550	550	50	50
Trans. Comm. & Utilities	2450	2450	2450	0	0
Trucking & Warehsg.	450	400	400	50	50
Air Transportation	900	900	900	0	0
Other Trans. Comm. & Utilities	1100	1100	1150	0	-50
Trade	6150	6100	5800	50	350
Wholesale	1000	1000	1000	0	0
Retail	5150	5100	4800	50	350
Gen. Mer. & Apparel	1000	1000	1050	0	-50
Food Stores	1000	1000	900	0	100
Other Retail Trade	3150	3100	2850	50	300
Finance-Ins. & R.E.	750	700	700	50	50
Services & Misc.	3600	3550	3550	50	50
Government	10250	10250	9850	0	400
Federal	2000	2000	1850	0	150
State	4300	4300	4100	0	200
Local	3950	3950	3900	0	50

Nonagricultural Wage and Salary Employment
By Place of Work
Interior

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	12/84
Nonag. Wage & Salary	17450	17400	17300	50	150
Mining	100	100	50	0	50
Construction	1200	1200	1000	0	200
Manufacturing	350	350	300	0	50
Trans. Comm. & Utilities	1400	1400	1400	0	0
Trade	3800	3800	3400	0	400
Finance-Ins. & R.E.	450	450	400	0	50
Services & Misc.	2600	2600	2500	0	100
Government	7550	7500	7250	50	300

tion's percentage share has increased only slightly, while government's share increased by three percentage points. Government employment grew rapidly in 1983, but growth has slowed in 1985. Budget restraints may explain government now having a larger share of unemployment claimants. Fairbanks' "typical" unemployment claimant remains the young male construction worker, but all industries and occupations are part of Fairbanks' unemployment claimant picture. For further information concerning Alaska's Unemployment Insurance Program, please refer to *Unemployment Insurance Study and Financial Handbook*, December 1985.

Current Trends

The year-end labor force numbers are now available and indicate only small changes in Fairbanks employment statistics. Fairbanks' unemployment rate was 8% for 1985, four tenths of a percentage point lower than in 1984. Employment grew but the number of unemployed was virtually unchanged. The result is an unemployment rate that is lower than last year. Fairbanks' rate remained higher than most of Alaska's other urban areas and above the other census areas. Anchorage's rate was 7.4% and Juneau's was 9.3%. Seasonality and a large construction sector appear to be two major reasons for this difference.

Gulf Coast

By Neal Fried

Kodiak's 1985 Economy

A year ago we examined Kodiak's economic trends in the early 1980's and concluded that Kodiak's economy had not prospered along with the rest of the state. This trend in Kodiak's economy remained unchanged in 1985. Total wage and salary employment remained flat (based on employment data for the first 6 months of 1985). Kodiak's king crab industry did not improve and no recovery in Aleutian Islands's logging industry occurred. Kodiak's construction activity peaked in 1983 with 582 jobs and fell to 285 jobs in 1985. Fish processing employment did not change, even though Kodiak had a good salmon season. Though employment remained unchanged in 1985, total wage and salary payroll fell by 10%. Total payroll fell because the proportional mix of the industries changed. Employment in the high-paying construction industry fell while the low-paying retail trade industry employment grew. The trade employment growth was not enough to make up for the shortfalls in the construction payrolls.

Retail trade employment grew 17% in 1985 and has grown 38% over the last five years. Statewide this industry boomed. Prior to the 1980's, Kodiak had less retail employment than would be expected for its population size and income, but like much of the state is now playing catch-up. Kodiak's population also grew in spite of this weak employment picture, providing more stimulus to trade. Outside investment in this industry became more prevalent and a good deal of local investment activity also occurred. Growth in retail trade is a national trend as more people choose to eat out and demand more specialized retail services.

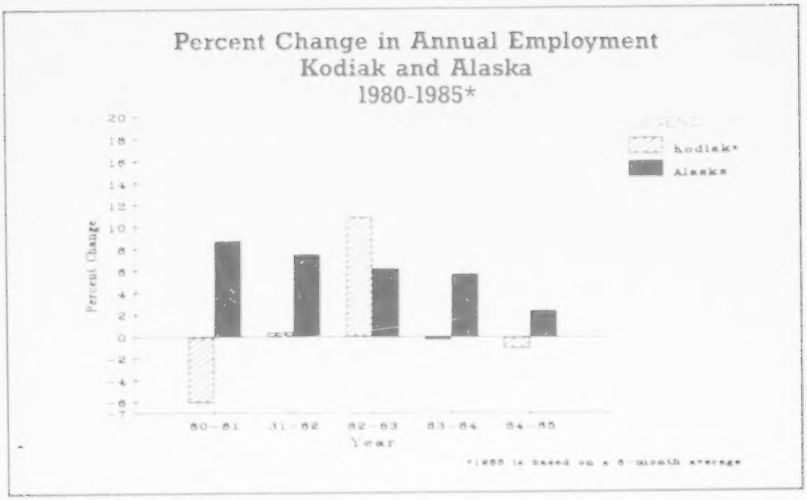
On the government side the Coast Guard has been undertaking an ambitious construction program, building new housing, recreation and administrative centers and other facilities. State government employment grew enough to push total government employment to the plus side while local and federal government remained stable.

The Future

There have been some recent developments in Kodiak's economy that may improve the employment picture. The commencement of a bottom fishery is taking place and a number of fish processors are now processing bottomfish in a variety of ways for international and domestic markets. New ice will be installed into Kodiak's logging industry. There are plans to log again on Afognak Island beginning this spring.

Nonagricultural Wage and Salary Employment
By Place of Work
Gulf Coast

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	12/84
Natural Resources & Mining	1,900	2,000	1,650	-100	250
Mining	900	900	850	0	50
Construction	1,000	1,100	1,250	-100	-250
Manufacturing	2,900	2,900	2,900	0	0
Food & Kindred Products	1,900	1,900	1,900	0	0
All Other Mfg	1,000	1,000	1,000	0	0
Trans, Comm, & Utilities	1,200	1,200	1,150	0	50
Trade	3,700	3,700	3,450	0	250
Wholesale	700	700	650	0	50
Retail	3,000	3,000	2,800	0	200
Finance, Ins, & R.E.	650	650	600	0	50
Services & Misc	2,800	2,800	2,650	0	150
Government	3,400	3,400	3,200	0	200
Federal	900	900	900	0	0
State	1,000	1,000	900	0	100
Local	1,500	1,500	1,400	0	100



A workcrew of 45 will be hired this year and plans for further expansion are expected. Tourism is also projected to grow.

On the down side are falling state revenues. In the future less state dollars will be available for capital construction projects for local government operating budgets and for state government employment. Possible cuts in the Coast Guard have been announced. If this happens it could be devastating to the local economy. The Coast Guard's presence in Kodiak is large (1089 Coast Guard personnel were stationed in Kodiak in 1985) and it provides a stabilizing influence on the area's economy.

During 1986 no significant change in employment is expected. Employment should remain stable. The long run picture depends on the fortunes of the fishing industry and how fish tax revenues decline. The king crab fishery cannot get much worse, but it may be a number of years before it recovers. It would take many years for the bottomfishery to take its place. If the king crab fishery recovers and the bottomfishery flourishes, Kodiak's future economy cannot register strong growth in spite of falling tax revenues.

Current Trends

All areas within the Gulf Coast region recorded double digit unemployment rates in December. The Kenai Peninsula topped the region with 16.5%. The region's rates also remain all over year-ago figures as a result of slower military build growth and layoffs in the construction industry.

December was truly a bleak month for wage and salary employment. All of the region's industries posted either zero over the month changes or declines. Fish processing and construction were the big losers and even retail trade lost ground in December. All of these losses were largely seasonal in nature. On the bright side, over-the-year growth still exists. Growth it is not as robust as it has been in past years—a sign of a slowing economy.

Southeast Alaska

By John Boucher

Southeast's Wood Products Industry

One of Southeast Alaska's primary employers has been the timber industry. Public land use policy and Far Eastern demand for forest products had combined to make the timber industry Southeast Alaska's most productive year round private industry. However, since 1980 diminished demand coupled with increased competition from Canadian and Pacific Northwest producers changed the outlook for the timber industry in Southeast Alaska dramatically.

Prior to the downturn in demand, Alaska's timber industry had three dominant players, Alaska Lumber and Pulp, Louisiana-Pacific Corporation, and the United States Forest Service. The origins of the timber industry in Southeast date from a desire on the part of the federal government to create an industry using timber from the Tongass National Forest. It is required by the government that all timber harvested from the federally owned land be processed locally. The Forest Service's role was to administer the forest on behalf of the government by providing selected timber for sale and overseeing infrastructure development such as road building.

The two private corporations used timber from federal land to provide jobs at sawmills and pulp mills in Southeast Alaska. The Southeast Alaska timber industry found its market niche in the Far East, since it could not compete in the lucrative U.S. housing market with the Pacific Northwest and Canadian producers due to higher transportation and labor costs.

While worldwide demand for wood products was high, the Southeast timber industry was able to survive even though it was probably one of the more costly producers. Since 1980 the demand for housing, both in the United States and Japan, has declined. Even more significantly, the average square foot of new dwellings has decreased due to construction costs and energy conservation. Also, demand for man made fibers such as rayon, of which pulp is an ingredient, has also fallen off. The shrinking world market heightened competition for markets. Other Pacific Northwest producers became interested in the Far Eastern markets. The competitive disadvantage of Southeast Alaska producers has taken its toll in terms of industry employment. Curtailed production has resulted in sporadic and permanent closing of facilities since 1980.

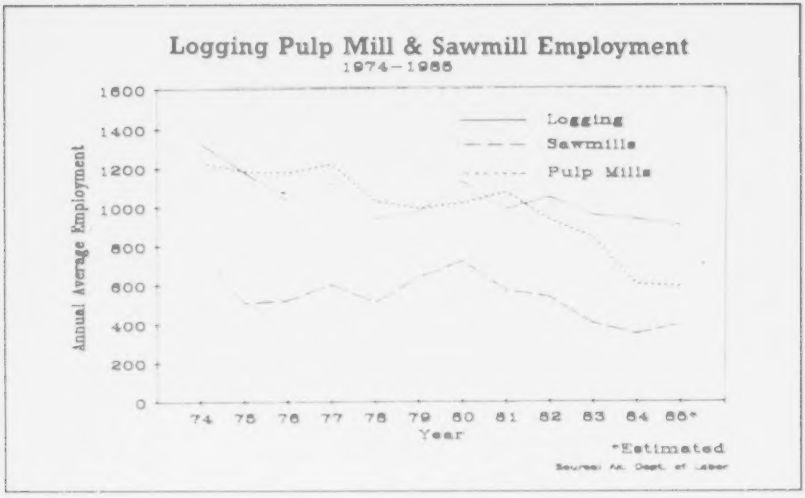
While the traditional powerhouses in the timber industry have been struggling, new players in the industry have been making themselves felt. These new players are the Southeast Alaska native corporations. The Alaska Native Claims Settlement Act (ANCSA) entitled village and regional native corporations to select prime timber lands as part of the assets of their corporations. This made the native corporations some of the largest private landowners in Southeast Alaska.

The native corporations are flourishing in the timber industry while the traditional giants are faltering because native owned lands do not have the primary manufacturing requirement that is an integral part of federally controlled timber in Southeast Alaska. Since they are not bound to produce a finished product they do not have to recover the added value in a higher product cost. The Japanese have also demonstrated a preference for logs in the round over the squared off cants that Southeast Alaska mills produce, so in addition to the product being cheaper, the native corporations timber product is more desired.

The change in the Southeast Alaska timber industry is evidenced in the graph. It is apparent that the pulp mill portion of the industry has been the hardest hit during the last ten years. Employment in this sector has faced a steady decline since 1977, even during the run up of oil and other commodity prices in 1979 and 1980, the pulp mill portion of the Southeast timber industry had no employment gains. The announcement recently that the Ketchikan pulp mill will close indefinitely in February is a reflection of the steady drop in demand for pulp products.

Sawmill employment has fared better than the pulp mills. However, since 1980 they have also had a steady decline in employment. The sawmill portion of the industry is much more segmented than the pulp mill sector because there are more individual operators involved. The two large corporate players participate in this segment of the industry, however, their role has become less significant during this period. Alaska Lumber and Pulp was the owner and operator of the largest sawmill in Southeast Alaska, the Wrangell mill, until it was sold to another firm in 1984. Louisiana Pacific is still operating several sawmills, however, the largest of their facilities, the Ketchikan spruce mill, closed during a union dispute several years ago and has not reopened. Smaller operations in Southeast have struggled to avoid bankruptcies and foreclosures.

The logging sector of the industry is weathering the current problems best. Employment in this sector has declined, but not to the same degree of the other two sectors of the industry. This is due to the involvement of Southeast native corporations in the export of round logs. The short term outlook for this segment of the industry is fairly good.



Nonagricultural Wage and Salary Employment
By Place of Work
Southeast Alaska

	P/ 12/85	R/ 11/85	12/84	Changes From: 11/85	12/84
Natural Resources & Mining	1,450	1,450	1,500	0	-50
Construction	1,850	2,400	1,900	-550	-50
Manufacturing	7,900	8,000	8,000	-100	-100
Food & Kindred Prod.	900	900	950	0	-50
Lumber & Paper Prod.	2,450	2,550	2,550	-100	-100
All Other Mfg.	4,550	4,550	4,500	0	50
Trans. Comm. & Utilities	3,100	3,250	3,250	-150	-150
Trade	9,400	9,500	9,500	-100	-100
Wholesale	1,900	1,900	1,900	0	0
Retail	6,500	6,600	6,600	-100	-100
Finance Ins. & R.E.	1,900	1,900	1,900	0	0
Misc. Services & Misc.	4,550	4,800	4,300	-250	250
Government	12,250	12,350	12,000	-100	250
Federal	3,850	3,900	3,900	-50	-50
State	3,450	3,500	3,400	-50	50
Local	4,950	4,950	4,700	0	250

Southeast Alaska offers one of the last areas in the world where old growth spruce is readily available, however, native lands are not infinite and exhaustion of this resource in the long term must be avoided for logging to remain viable.

Current Trends

Southeast Alaska wage and salary employment continued to trend downward in the month of December, falling 550 jobs from November's level. The manufacturing and construction industries were the largest employment losers, each declining by 250 jobs. The drop in the manufacturing industry was largely the result of declines in the lumber and paper products industry.

Unemployment for the Southeast region increased four-tenths of one percentage point in December to 12.2% (see center insert). The census area with the highest unemployment rate was the Prince of Wales-Outer Ketchikan area while Juneau had the regions lowest unemployment rate at 10.8%. Preliminary annual averages for 1985 indicated dramatic improvement in the unemployment rate for the Southeast region for 1985. The Ketchikan Gateway Borough and the Wrangell-Petersburg census divisions had the most dramatic improvement in their unemployment rates. Ketchikan dropped from 15.1% unemployed to 10.3% while Wrangell-Petersburg declined from 16.1% to 11.0% unemployed.

Hours and Earnings

By Kathleen Thomas

Personal Income by Census Division

The Department of Commerce, Bureau of Economic Analysis (BEA), calculates total and per capita personal income for each of Alaska's census divisions, as well as statewide total and per capita income as discussed in last month's Alaska Economic Trends. (The BEA still uses the old census divisions. Alaska Planning Information published in February 1985 gives comparative maps of the old and new areas.) By using BEA's figures, an approximation of the absolute and relative income of each census division can be measured. The components of personal income are wages and salaries, proprietors income with inventory valuation and capital consumption dividend income, personal interest income, rental income and transfer payments. Personal contributions for social insurance are subtracted. The calculations for census division income lag one year behind state income with the most recent census division data being 1983.

Anchorage had the largest total personal income of any census division. Fairbanks was second. However, the effects of higher total personal income were minimized when population was taken into account as was done with per capita income. Those areas with the highest total personal income did not necessarily have the highest per capita income. Anchorage had 49% of total personal income, however, its per capita income was only 10% above the state average. Barrow-North Slope had one of the smallest total personal income, only 1% of the state total, but its per capita income was 22% above the state level.

The Barrow-North Slope census division also had the highest per capita personal income of all the census divisions. Juneau was not far behind with the second highest per capita income. Fairbanks and Anchorage were third and fourth respectively. Wade Hampton had the lowest per capita income with Kuskokwim having the next lowest. Areas with an established industrial base whether mining as in Barrow-North Slope or government as in Juneau consistently had higher per capita incomes. Rural areas without a steady source of employment or industry had lower per capita incomes.

Rates of total personal income growth, the percentage change in total personal income from 1982, were positive for all census divisions. Whether a division was urban or rural had little to do with its rate of growth. Kuskokwim census division had one of the lowest per capita incomes but one of the highest rates of growth, 18.2%. Outer Ketch-

Personal Income by Census Division
1983

	Total Personal Income (in Millions of Dollars)	Per Capita Income (Dollars)	Per Capita Income % of National Average	% Change of Total Personal Income From 1982
U.S.	3,794,364	11,887	100	8.2
Alaska	7,941	17,295	145	10.0
Aleutian Islands	38	20,083	169	8.0
Anchorage	3,171	20,023	168	10.9
Angoon	4	4,000	34	3.3
Barrow North Slope	1,241	17,743	149	22.6
Bethel	206	7,666	64	14.1
Bristol Bay Borough	31	17,222	145	5.9
Bristol Bay	31	17,222	145	15.9
Chitina-McCarthy	4	2,000	17	3.4
Fairbanks	1,844	14,109	119	5.8
Haines	106	14,133	119	13.6
Juneau	2,127	20,220	170	7.3
Kenai Cook Inlet	1,941	14,611	123	7.4
Ketchikan	1,206	17,579	148	7.4
Kiana	51	5,318	45	6
Kodiak	1,010	20,202	170	10.8
Kuskokwim	1,441	9,610	81	15.2
Matanuska-Susitna	1,384	11,384	96	14.3
Nome	1,000	13,699	115	13.8
Outer Ketchikan	1,207	17,243	145	17.1
Prince of Wales	1,207	17,243	145	10.8
Seward	1,000	20,000	168	10.6
Sitka	1,000	20,000	168	7.5
Skagway-Yakutat	1,000	20,000	168	12.9
Southeast Fairbanks	1,000	20,000	168	7.1
Upper Yukon	1,000	20,000	168	7.1
Valdez-Cordova-Wrangell	1,000	20,000	168	7.1
Wade Hampton	1,000	20,000	168	7.1
Wrangell-Petersburg	1,000	20,000	168	7.1
Yukon Koyukuk	1,000	20,000	168	7.1

Source: U.S. Department of Commerce, Bureau of Economic Analysis

ikan,at 17.3%, had the highest rate of growth. Valdez-Chitina-Whittier, at 0.2%, had the lowest rate. Only seven of the 29 census division had a slower growth rate than the national level.

Current Trends

Average hourly earnings in the lumber and paper products sector of manufacturing continued to trend downward. However, the year to year change is unusually dramatic. During November and December of 1984 lumber and paper products experienced a down turn in activity. Because of this slowdown a large number of lower paid employees were laid off. With a decrease in the number of lower paid employees, average hourly earnings increased.

Average hourly earnings in mining declined from their November high. December has traditionally been a slow month in mining especially after the high levels of activity in November. Most mines in the northern portion of the state wait until the ground freezes to transport heavy equipment needed for their operations. Because of the increased activity more overtime is worked thereby increasing average hourly earnings.